



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/986,532

11/09/2001

Jedrick J. Weldon

09710-1111

5779

25537

7590

12/14/2004

MCI, INC
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW, 10TH FLOOR
WASHINGTON, DC 20036

EXAMINER

HYUN, SOON D

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,532

Applicant(s)

WELDON ET AL.

Examiner

Soon D Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-18, 20, 21 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-12 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments with respect to claims 1-12 and 22-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5, 7-12, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Schuster et al (U.S. Patent 6,512,761).

Regarding claims 1 and 9, Schuster et al (Schuster) discloses a method and a system measuring delay parameters in a packet switching network between a transmitter 12 (a proving router with a routing engine) and a receiver 20 (a destination node or a predetermined location in claim 23) over Internet communication network (FIG. 2), the method comprising the steps of:

forwarding a data packet to the receiver of the packet communication network that is reachable by any one of a plurality of connectionless communication paths (paths A, B, C in FIG. 5) in the network, wherein the packet traverses a particular

communication path with lowest delay among the plurality of connectionless communication paths to the destination node (steps 68 and 70 in FIG. 5); and

generating and sending a probe message (a message for regular measurement, col. 15, lines 23-28) over the particular communication path for determination of delay parameters (statistics of the communication network) for the packet.

Regarding claims 2, 5, and 10-12, and 23, Schuster further discloses that the probe message is sent at a sender time and the probe mechanism receives a reply probe message at a receiver time (T2), sent by the destination node in response to receiving the probe message with a remote latency indicator (delay information) therein so that service level agreement characteristics may subsequently be derived by comparing T1, T2 and the remote latency indicator (col. 12, line 58-col. 13, line 57 and FIG. 3).

Regarding claim 3, Schuster does not explicitly teach a memory storing the delay parameters (the service level agreement characteristics) identified by the probe mechanism, but the memory is inherently required to implement the steps.

Regarding claim 7, Schuster does not explicitly teach a probe poller device that calculates the delay parameters (the service level agreement characteristics), but the device is inherently required to implement the steps.

Regarding claim 8, Schuster further teaches a packet loss rate for measuring the delay parameters (col. 15, line 66-col. 16, line 18).

Regarding claims 24 and 25, Schuster teaches the Internet between the transmitter and the receiver, i.e., the probe packet is transferred with a source IP

Art Unit: 2663

address and a destination address via the Internet which comprises a source router and a destination router that is associated with the predetermined location (col. 8, lines 46-58).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (U.S. patent No. 6,512,761).

Refer to the discussion for the claim 1. However, Schuster does not explicitly teach that a polling interval (a measurement interval) at which the probe mechanism

Art Unit: 2663

sends the probe message is programmable. It would have been obvious to one having ordinary skill in the art to make the program (a computer-readable medium) of Schuster including the polling interval to be programmable to adjust the program according to various occasions and to take advantage of using software.

7. Claims 4, 13, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (U.S. patent No. 6,512,761) in view of Casey (U.S. Patent No. 6,493,349).

Refer to the discussion for the claims 1 and 9.

However, Schuster does not explicitly teach that the Internet between the transmitter and the receiver comprises virtual private network architectures.

Casey discloses a communication network to offer service level agreements relating to delay, packet loss etc. for an IP VPN, wherein tunneling (channel) is a one of various mechanism used for the IP VPN. See col. 3, line 26-65. Those of skill in the art would have been motivated by Casey to incorporate the IP VPN scheme into Schuster to measure delay parameters for an IP VPN. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a tunnel channel in a virtual private network into Schuster to measure delay parameters for an IP VPN.

Allowable Subject Matter


8. Claims 14-18, 19-21 and 26 are allowed.

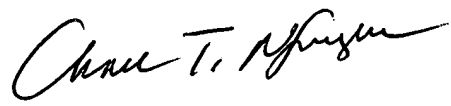
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon D Hyun whose telephone number is 571-272-3121. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


S. Hyun
12/08/2004


CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600